



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/783,896      | 02/20/2004  | Sandra Helton McCain | 2003-0753.01        | 7194             |

21972 7590 08/29/2006

LEXMARK INTERNATIONAL, INC.  
INTELLECTUAL PROPERTY LAW DEPARTMENT  
740 WEST NEW CIRCLE ROAD  
BLDG. 082-1  
LEXINGTON, KY 40550-0999

EXAMINER

FAISON GEE, VERONICA FAYE

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1755

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

|                              |  |                                      |  |
|------------------------------|--|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/783,896   | <b>Applicant(s)</b><br>MCCAIN ET AL. |  |
|                              | <b>Examiner</b><br>Veronica Faison-Gee | <b>Art Unit</b><br>1755              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5,7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1,2,9,10 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1, 2, and 5 have been amended, claims 9 and 10 have added and claims 3-4, 6 and 8 have been canceled. Hence, claims 1, 2, 5, 7, 9 and 10 are pending in the application.

### ***Election/Restrictions***

Newly submitted claims 1, 2, 9 and 10 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The invention is now directed to a inkjet printhead instead of an ink set.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1, 2, 9 and 10 have withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 5 and 7 are still directed to an ink set and will be examined with all of the limitations from independent claim 1, which are directed to the composition of the ink set.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1755

Claim 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Takemoto (US Patent 6,075,069).

Takemoto teaches an ink set that comprises a yellow ink, magenta ink having a lower color density containing a magenta colorant, magenta ink having a higher magenta colorant, cyan ink having a lower color density containing a cyan colorant, cyan ink having a higher color density containing a cyan colorant and optionally a black ink (abstract, col. 2 lines 42-49, and col. 3 line 67-col. 4 line 14). The reference further teaches that the colorant may be a dye or pigment, and with a pigment is used that a polymeric dispersant may be used including nonionic dispersant such as acetylene glycol (i.e. Surfynol 465 and Surfynol TG) (col. 6 line 56-col. 7 line 30). The reference remains silent to the amount of dye used in the composition. The amount of pigment present in the ink composition may be in the range of 0.5 to 25 percent by weight (col. 7 lines 26-28). The reference remains silent to the optical density percentage of the dilute color ink. However it is the position of the Examiner this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain an ink composition with applicants claimed optical density percentage, because the amount of colorant and other components are similar to the ink composition disclosed in Applicant's specification. The composition as taught by Takemoto appears to anticipate the claimed invention. The composition as taught by Takemoto appears to anticipate the claimed invention.

Claims 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanaya et al (US Patent 6,482,256).

Kanaya et al teach an ink set comprising a yellow ink, two magenta ink composition different from each other in color density and two cyan ink composition different from each other in color density (col. 6 lines 39-47). The colorant in the yellow ink is in the amount of 0.3 to 6 percent by weight (col. 9 lines 13-15). The magenta ink with higher color density is referred to as the deep magenta ink and the lower color density is referred to as the light magenta ink. The reference teaches that the magenta colorant is present in the amount of 0.5 to 5 percent by weight (col. 9 line 29-col. 10 line 20). The cyan ink with higher color density is referred to as the deep cyan ink and the lower color density is referred to as the light cyan ink (col. 18 lines 52-58). The reference teaches that the amount of cyan colorant present is in the range of 0.4 to 6 percent by weight (col. 19 line 56-col. 20 line 25). The reference also teaches that a black ink may be included in the ink set and the colorant may be dye or pigment such as carbon black (col. 21 lines 9-24). A surfactant may also be added to the ink composition in the amount of 0.1 to 3 percent by weight that include acetylene glycol (i.e. polymeric dispersant including Olfine STG and Olfine E 1010(col. 22 lines 16-56). The reference remains silent to the optical density percentage of the dilute color ink. However it is the position of the Examiner this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain an ink composition with applicants claimed optical density percentage, because the amount of colorant and other components are similar to the ink composition disclosed in Applicant's specification. The composition as taught by Kanaya et al appears to anticipate the claimed invention.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica Faison-Gee whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

vfg  
8-23-06

  
J.A. LORENGO  
SUPERVISORY PATENT EXAMINER